

## **APPENDIX B**

### **STATEMENT OF WORK FOR REMEDIAL DESIGN AND REMEDIAL ACTION FOR THE AREA-WIDE INTERIM GROUND WATER ACTION HASTINGS GROUND WATER CONTAMINATION SITE HASTINGS, NEBRASKA**

#### **1.0 INTRODUCTION**

##### **1.1 Site Description**

EPA has been investigating sources of ground water contamination in the Hastings area since 1984. Due to the high levels of volatile organic compounds (VOCs) found in three municipal wells, EPA designated the contaminated area as the Hastings Ground Water Contamination Site (Site). The Site was placed on the National Priorities List in 1986. The Site was divided into seven subsites for investigative and remediation purposes, on the basis of geographic and constituent source area characteristics. The subsites include the Former Naval Ammunition Depot (NAD), FAR-MAR-CO, North Landfill, South Landfill, Second Street, Colorado Avenue, and Well #3. The Area-Wide Ground Water Action is a separate operable unit (OU 19) and addresses contamination present at, and migrating from, all the subsites but the NAD, that is not being captured by subsite actions.

EPA's selected remedy is Institutional Controls and Related Actions. The selected remedy will ensure protection of human health by eliminating the potential for exposure through institutional control actions and other related actions. Implementation of institutional controls and related actions will continue until Health-Based Levels are achieved within the institutional control area. Health-Based Levels are defined as the maximum contaminant levels (MCLs) for the contaminants of concern (COCs) established under Nebraska Title 118 Ground Water Quality Standards and the Safe Drinking Water Act. In the absence of an established MCL, the Health-Based Level shall be the  $1 \times 10^{-6}$  cancer risk-level or the lifetime (non-cancer) health advisory level for the COC.

## 1.2 Purpose

The purpose of this Statement of Work (SOW) is to set forth the requirements for the Remedial Design (RD) and Remedial Action (RA) of the selected remedy as defined in the Interim Action Record of Decision (ROD) for the Area-Wide Ground Water Action issued on June 25, 2001. The RD is generally defined as those activities to be undertaken to develop the final plans and specifications, general provisions, and special requirements necessary to translate the ROD into the remedy to be constructed under the RA phase. In this instance, the RD refers to the completion of an inventory of all existing ground water wells within the Institutional Control Area (ICA) and the design of the ground water monitoring program within the ICA, as defined in the Consent Decree (Section IV DEFINITIONS). The RA is generally defined as the implementation phase of site remediation or construction of the remedy, including necessary operation and maintenance, performance monitoring, and special requirements. In this matter, the RA will include the construction of monitoring wells, as necessary, the sampling and analysis of existing and newly constructed wells, the preparation of Annual Reports that evaluate the effectiveness of measures taken pursuant to City Ordinance #3754 (Attachment 3), and provision of alternate water supply to users of domestic water within the ICA where the domestic water well does not meet Health-Based Levels as established by this SOW. The remedy includes the RD and RA.

## 1.3 General Requirements

A list of primary guidance and reference material is attached (Attachment 1). In all cases, the Work Parties shall use the most recently issued guidance.

1.3.1 Contacts: The EPA contact for this SOW is Paul Doherty, 913-551-7924.

1.3.2 Deliverable Schedule: A summary of the major deliverables and a schedule for submittals are attached (Attachment 2).

1.3.3 Scope: The RD/RA involves the design, construction, and implementation of institutional control actions and a ground water monitoring program to restrict access and monitor exposure to contaminated ground water. Ground water monitoring may include monitoring ground water at the subsites (excluding the NAD) while the subsite actions are ongoing. The Work Parties shall furnish all necessary and appropriate personnel, materials, and services needed for, or incidental to, performing and completing the RD/RA.

1.3.4 EPA's Role: EPA will provide oversight of the Work Parties' activities throughout their performance of the RD/RA. EPA review and approval of deliverables is a tool to assist this process and to satisfy, in part, EPA's responsibility to provide effective protection of public health, welfare, and the

environment. EPA will review deliverables to assess the likelihood that the RD/RA will achieve its goal of protecting human health and the environment from exposure to contaminated ground water and that its performance and operations requirements have been correctly identified. Acceptance of plans and specifications by EPA does not relieve the Work Parties of responsibility for the adequacy of the design. Pursuant to Section XI of the Consent Decree (EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS), EPA retains the right to disapprove of the Work Parties' submittals, subject to Section XIX in the Consent Decree (DISPUTE RESOLUTION). The EPA may disapprove any contractor, plan and specification, process, or other submittal as provided by the Consent Decree, subject to Section XIX in the Consent Decree (DISPUTE RESOLUTION).

## **2.0 SELECTED REMEDY**

### **2.1 Description of Selected Remedy**

The selected remedy for the Area-Wide Ground Water Action was developed to protect human health and the environment by restricting exposure to contaminated ground water through institutional controls until Health-Based Levels are achieved within the ICA. The selected remedy includes the following components:

**2.1.1 Institutional Controls:** Institutional controls will prevent exposures by the public to contaminated drinking water supplies. Institutional controls have been promulgated in City Ordinance # 3754. The Work Parties shall implement selected provisions of City Ordinance # 3754, as discussed in this SOW.

**2.1.2 Baseline Well Inventory and Initial Ground Water Assessment:** The Work Parties shall conduct a comprehensive inventory of all existing ground water wells (domestic, irrigation, industrial and monitoring wells) within the ICA and submit the results either as a separate report or as part of the RD/RA Work Plan. The inventory shall identify users of existing wells who are potentially at risk and identify wells that may be used in developing the ground water monitoring program. An initial assessment of ground water quality shall be made by collecting and analyzing eight consecutive quarters of ground water data from representative locations. This inventory and assessment will be used as the basis for designing a long-term ground water monitoring program which will remain in effect until the levels of the COCs are determined to be below Health-Based Levels. As stated in Section 5 herein, the Work Parties may submit existing data to EPA for consideration to satisfy the requirement of providing eight consecutive quarters of ground water data.

**2.1.3 Ground Water Monitoring Program:** The Work Parties shall monitor ground water contaminant levels consistent with the Ground Water Monitoring Plan that they submit as part of the RD/RA Work Plan. The Work Parties shall continue the monitoring program

until the levels of all COCs found to be present through monitoring in the ICA are determined by EPA to be below Health-Based Levels. EPA may require that ground water monitoring include monitoring activities at the subsites (excluding the NAD) while subsite actions are ongoing. Sections 4 and 5 of this SOW provide further details of this requirement.

**2.1.4 Alternative Water Supply:** The Work Parties shall provide an alternative water supply whenever monitoring determines that concentrations of targeted COCs exceed Health-Based Levels in a drinking water supply. Section 5.1.7 provides further details of this requirement.

**2.1.5 Monitoring Reports:** The Work Parties shall prepare Annual Reports which present and evaluate the analytical results for samples collected during the reporting period. The first annual report shall be submitted on the first day of the thirteenth month following the lodging of the Consent Decree and shall be submitted annually on that date until EPA notifies Work Parties pursuant to Section XIV (CERTIFICATION OF COMPLETION). Work Parties shall submit a comprehensive Five-Year Report on the same date as the fifth Annual Report and every 5 years on that date. Reports shall document the continued protectiveness of the Remedial Action and shall identify actions necessary to ensure the continued protectiveness of the remedy in the future. Section 5.5 herein provides further details of this requirement.

## **2.2 Remedial Action Objective for Selected Remedy**

The Work Parties shall design and implement the remedy described in Section 2.1 above to meet the RA Objective to prevent the ingestion of contaminated ground water containing COCs above Health-Based Levels, as shown in Table 4 on page 5 herein.

The remedy shall continue until Health-Based Levels are attained for a minimum of four consecutive quarters for all COCs within the ICA.

## **3.0 PROJECT PLANNING AND SUPPORT**

### **3.1 Project Planning/Management**

**3.1.1 Designation of Project Coordinator:** The Work Parties have identified their Project Coordinator as David Wacker and their Alternate Project Coordinator as Marty Stange pursuant to Section XII of the Consent Decree (PROJECT COORDINATORS).

**3.1.2 Review and Approval of Supervising Contractor:** Pursuant to Paragraph 9, Section VI of the Consent Decree, the Work Parties shall propose a Supervising Contractor within ten (10) days of the lodging of this Consent Decree. The Supervising Contractor shall be a professional with experience in hazardous waste

remediation, natural attenuation and ground water monitoring. The Work Parties' Supervising Contractor may assume the role(s) of Project Coordinator, RA Constructor or Quality Assurance Official with the following exception, the Supervising Contractor shall not assume both the role of RA Constructor and Quality Assurance Official. The Work Parties shall demonstrate to EPA: 1) the proposed Supervising Contractor's professional reputation; 2) professional registration(s); 3) ground water remediation related experiences and qualifications specifically required for the project; 4) sufficient capacity in professional, technical and support staff to implement the project within the required schedule; and 5) sufficient business background and financial resources to provide uninterrupted services throughout the life of the project.

<p style="text-align: center;"><b>Table 4</b> <b>Health-Based Levels</b> <b>(Maximum Contaminant Levels, Cancer Risk Levels, and Health Advisory Levels)</b> <b>for Contaminants of Concern</b></p>					
Contaminant of Concern	<i>Drinking Water Standards and Health Advisories, EPA 822-B-00-001, Summer 2000</i>				
	Standards		Health Advisories		
	MCLG (µg/l)	MCL (µg/l)	Lifetime (non-cancer) (µg/l)	1 x 10 <sup>-4</sup> Cancer Risk (µg/l)	1 x 10 <sup>-6</sup> Cancer Risk (µg/l)
Benzene	zero	5	-	100	1
Carbon Tetrachloride	zero	5	-	30	0.3
Chloroform	zero	80	-	600	6
1,2-Dichloroethane	zero	5	-	40	0.4
1,1-Dichloroethene	7	7	7	-	-
Methylene Chloride	zero	5	-	500	5
Styrene	100	100	100	-	-
Tetrachloromethane	zero	5	10	-	-
Trichloroethylene	zero	5	-	200	2
Vinyl Chloride	zero	2	-	2	.02
Ethylene Dibromide	zero	0.05	-	0.05	0.0005
1,1,1-Trichloroethane	200	200	200	-	-
cis 1,2-Dichloroethane	70	70	70	-	-
trans 1,2-Dichloroethene	100	100	100	-	-
Naphthalene	100	-	-	-	-
Benzo(a)pyrene	zero	0.2	-	2	0.02

Consistent with Section VI of the Consent Decree (PERFORMANCE OF THE WORK), the Work Parties shall provide in writing the name of their proposed Supervising Contractor and a statement of his/her qualifications in sufficient detail to allow EPA to make a full and timely evaluation. The EPA may require that the Work Parties meet with EPA to discuss the performance and capabilities of their Supervising Contractor. If EPA notifies the Work Parties in writing that the performance of their Supervising Contractor is not satisfactory, the Work Parties shall take action to correct the deficiency. If performance of the Work Parties' Supervising Contractor continues to be deficient, the Work Parties, upon receipt of written request from EPA, will propose a new Supervising Contractor, subject to Section XIX in the Consent Decree (DISPUTE RESOLUTION).

- 3.1.3 Review and Approval of the Quality Assurance Official: The Work Parties shall submit the name, title and qualifications of their proposed Quality Assurance Official (QAO) in the RD/RA Work Plan. Pursuant to Section XI of the Consent Decree (EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS), the Work Parties' QAO shall be subject to disapproval by EPA. The Work Parties' QAO is required to be independent and autonomous from the RA contractor(s). The QAO may come from within the ranks of the Work Parties' own staffs or through a contractual relationship with a private consulting entity. The Work Parties' QAO shall have experience in design/implementation of the remedy selected. The Work Parties shall demonstrate to EPA the proposed QAO's professional reputation and design/implementation experience and qualifications specifically required for the project.
- 3.1.4 Review and Approval of Remedial Action Constructor: The Work Parties shall submit the name, title and qualifications of their proposed Remedial Action Constructor in the RD/RA Work Plan. The Work Parties' selection of the Remedial Action Constructor shall be based on professional reputation, previous experience in the type of construction activities to be implemented and the demonstrated capability to perform the required construction activities. The EPA, at the request of the Work Parties, will conduct a review of the Remedial Action Constructor as it relates to these items. The Work Parties shall provide the EPA with the name, title and point of contact of the Remedial Action Constructor's staff.

## 4.0 DATA ACQUISITION ACTIVITIES

### 4.1 Data Collection - Ground Water Monitoring

The Work Parties shall prepare a Ground Water Monitoring Plan (GWMP) as set forth in Section 5.0 of this SOW which shall define in detail the sampling and data gathering methods to be used during ground water sampling. The GWMP shall be subject to EPA approval as described in Section XI of the Consent Decree (EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS). At a minimum, the GWMP shall outline procedures for the collection and evaluation of analytical data which complies with the following data acquisition requirements:

4.1.1 Identification and Selection of Ground Water Monitoring Locations: Based on the baseline well inventory and data from the baseline ground water sampling described in Section 2.1 herein, the Work Parties shall identify in the GWMP identify all locations to be included in the ground water monitoring program. Selected locations shall include appropriate existing and/or newly installed ground water monitoring wells and may include locations at subsites (excluding the NAD) while subsite actions are ongoing. Criteria for selection of wells shall be based upon location with respect to targeted COC distribution, physical condition, and screened interval. The EPA, in consultation with the Work Parties, will select the final monitoring locations.

The Work Parties shall install new monitoring wells, as required by EPA, to implement the ROD including: 1) identification of levels of targeted COCs to provide sufficient advance warning, if necessary, of targeted COCs' migration toward potential human and environmental receptors; 2) establishment of additional horizontal and vertical ground water data collection points based on the information collected during the survey; and 3) collection of sufficient data to assess risks to potential human receptors.

4.1.2 Selection of Chemical Parameters at Each Monitoring Location: The Work Parties shall include provisions in the GWMP for the collection and analysis of ground water samples that comply with the following:

- (1) *General Chemistry* Ground water samples shall be analyzed for general chemistry parameters such as temperature, pH, oxidation reduction potential, conductivity, dissolved oxygen, nitrogen, iron, sulfate, total alkalinity, total dissolved solids. The GWMP shall also identify which parameters, if any, will be field analyzed and which parameters will be

tested in a laboratory.

- (2) *Contaminants of Concern:* Ground water samples shall be analyzed for the contaminants of concern which are summarized in Table 4 of this SOW.
- (3) *Frequency of Ground Water Monitoring:* Ground water monitoring data shall be collected at the frequency and locations identified in the GWMP. The sampling schedule shall be adequate to verify the boundaries of the plume, plume movement, and the quality of drinking water supplies. All drinking water supplies which approach or exceed Health-Based Levels shall be periodically sampled in accordance with the GWMP.
- (4) *Ground Water Elevations and Flow:* The ground water monitoring program shall include provisions to determine ground water elevation and flow direction within the aquifer.

## 4.2 Analytical Quality Assurance

- 4.2.1 Sample Analysis: The Work Parties shall arrange for the analysis of ground water samples collected as part of the ground water monitoring program. The Work Parties shall ensure that analytical tests are performed in accordance with the EPA-approved QAPP, consistent with Section VIII of the Consent Decree (QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS) and described under Task 5.1.2 herein.
- 4.2.2 Analytical Support and Data Validation: The Work Parties shall arrange for the validation of environmental samples collected during the previous task to ensure that the data are accurate and defensible. The Work Parties shall ensure that sample management and data validation activities are performed in accordance with the EPA-approved QAPP as described in Section 5.1.2 herein.
- 4.2.3 Data Evaluation: The Work Parties shall present an evaluation of the existing data and data gathered as part of the ground water monitoring program in the Annual Reports and the Five Year Reports. Data evaluation begins with the receipt of analytical data from the data acquisition task and ends with the submittal of the Data Evaluation Summary Report. Specifically, the Work Parties shall perform the following activities or combination of activities during all data evaluation efforts:



- Data Usability Evaluation and Field QA/QC
- Data Reduction, Tabulation, and Evaluation
- Evaluation, interpretation, and tabulation of data in an appropriate format for final data tables
- Design and set up of an appropriate database for pertinent information collected that will be used to ensure the protectiveness of the remedy
- Data Evaluation Report
- Data Evaluation Summary Report to be submitted to EPA and the State for review and approval

## **5.0 REMEDIAL DESIGN AND REMEDIAL ACTION TASKS**

### **5.1 RD/RA Work Plan**

Pursuant to Section V of the Consent Decree (GENERAL PROVISIONS), the Work Parties shall submit a RD/RA Work Plan which shall document the overall management strategy for performing the design, construction, operation, maintenance and monitoring of the Remedial Action. This plan shall document the responsibility and authority of all organizations and key personnel involved with the implementation and shall include a description of qualifications of key personnel directing the RD/RA activities, including contractor personnel. In addition, the Work Plan shall include:

- 5.1.1 Health and Safety Plan (HSP): A site-specific HSP that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan in accordance with 40 CFR § 300.150 of the NCP and in compliance with requirements of the Occupational Safety and Health Administration set forth at 29 CFR § 1910.120 I(1) and (1)(2). This plan need not be submitted to EPA for review or approval but shall be made available to EPA upon request.
- 5.1.2 Quality Assurance Plan: A Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 shall be submitted to EPA for approval. The QAPP shall describe the project objectives and organization, functional activities, and quality assurance/quality control (QA/QC) protocols that shall be used to achieve the desired Data Quality Objectives (DQOs). The DQOs shall, at a minimum, reflect use of analytical methods for identifying contamination and addressing contamination consistent with the levels for remedial action objectives identified in the NCP. The QAPP developed for the Feasibility Study, submitted to EPA pursuant to Administrative Order on Consent EPA Docket No. VII-98-F-0022,

should be referenced or adapted whenever possible when preparing the QAPP for the RD. The Work Parties shall prepare a Ground Water Monitoring Plan (GWMP) consistent with the QAPP and in accordance with Sections 4.0 and 5.1.6 herein.

5.1.3 Basis For Design Section: The Basis of Design Section shall include the following components:

- Summary and Detailed Justification of Assumptions. This summary shall include: (1) the technical basis for assumptions (i.e., plume locations, ground water flow); (2) a detailed evaluation of how applicable, relevant and appropriate requirements (ARARs) will be met; and (3) a plan for minimization of environmental and public impacts.
- Identification of Permitting Requirements. The need for permits shall be identified and submitted as part of the RD/RA Work Plan.
- Identification of Access Requirements. The need for access shall be identified and submitted as part of the RD/RA Work Plan.
- 

5.1.4 Institutional Controls Section: The Institutional Controls Section shall include a discussion of how the the Work Parties plan to implement and maintain the following provisions of the institutional control ordinance:

- Drinking and monitoring well testing;
- Installation of warning signs;
- Provision of alternate water supply if the contamination associated with OU 19 exceeds Health-Based Levels;
- Assessment of existing domestic wells and removal from use if determined to be unsafe for use; and
- Enforcement and compliance monitoring activities.

5.1.5 Baseline Well Inventory Section: The Baseline Well Inventory Section shall address the strategy for completing the comprehensive survey of wells within the ICA: beginning at the intersection of 12<sup>th</sup> Street and Crane Avenue in Hastings; thence East on 12<sup>th</sup> Street to Maxon Avenue to J Street; thence West on J Street to Crane Avenue extended; thence North on Crane Avenue extended to the point of beginning. In this section, the Work Plan shall evaluate the location of each well along with the well log information and any available monitoring data to determine if the well should be included in a long-term ground water monitoring program. The Work Parties shall select sampling locations based on the criteria that these locations are either critical drinking water wells or, due to their location

or historical sampling history, provide critical information on the location and or movement of known contamination plumes. The Work Parties shall sample these critical wells for a minimum of eight quarters to provide a baseline of information on current contaminant levels. In the event that the Work Parties believe that sufficient sampling has been conducted on the critical wells, this information should be summarized and submitted to EPA for review. This Section shall include a discussion of data quality, including a thorough discussion of sampling and analytical methodologies. If EPA determines that the existing data is sufficient to design the GWMP, the requirement for eight quarters of sampling will be waived.

The EPA, in consultation with the State, will also review the locations and logs of each well to evaluate the need for additional monitoring wells and, if needed, determine the location and screened interval of any such additional monitoring wells. If EPA does identify the need for additional monitoring locations, the Work Parties shall monitor additional wells at the locations and screened intervals that EPA identifies.

The Settling Defendants shall provide EPA and the State and their representatives (including contractors) access to any property they own at the Site to which access is necessary to effectuate the RA. If the Settling Defendants do not own the property where access is needed, the Work Parties shall use their best efforts, as defined in Section IX (ACCESS), to attain access for the purpose of performing the RA. The Work Parties shall also provide access to EPA, the State and their representatives, to areas where the installation, monitoring and sampling of ground water monitoring wells will be performed on properties not presently owned by the Settling Defendants.

- 5.1.6 Ground Water Monitoring Program: The Work Plan shall include the details of the long-term GWMP designed to monitor contaminant levels over the life of the project to ensure that drinking water supplies meet Health-Based Levels. The GWMP shall address anticipated annual maintenance requirements.
- 5.1.7 Alternative Water Supply: If concentrations of targeted COCs are detected in a drinking water supply at a residence above Health-Based Levels, the Work Parties shall notify the property owner and residents and offer these residents an alternate drinking water supply. Alternative water could be supplied by various options including: 1) connection to the municipal water supply or 2) a whole treatment system which effectively removes the contaminants. The option selected must provide long-term protectiveness for the life of the project. The Work Parties shall consult with the Nebraska Department of Health regarding the adequacy of the

option proposed. Where applicable, the Work Parties shall provide the property owner bottled water until the hookup or system installation is complete. The plan shall address anticipated annual maintenance requirements.

5.1.8 Annual Reports: Preparation of reports for this Remedial Action shall be in accordance with Section 5.5.

5.1.9 Construction Schedule: The Plan shall include a schedule for any significant project construction. The schedule shall identify the timing for initiation and completion of all critical path tasks. The schedule shall specifically identify duration for completion of the project and major milestones. The schedule shall be updated as necessary.

5.1.10 Construction Plans and Specifications: The Plan shall include a summary of anticipated construction drawings and specifications (general specifications, drawings, and schematics). All plans and specifications shall be developed in accordance with EPA's *Superfund Remedial Design and Remedial Action Guidance* (OSWER Directive No. 9355.0-4A) and shall demonstrate that the Remedial Action will meet all objectives of the Consent Decree and this SOW.

5.1.11 Construction Quality Assurance: The Work Plan shall address construction quality assurance issues, including:

- a list of all organization and key personnel involved in the remediation action construction, including their responsibilities and authorities;
- identification and qualifications of the construction quality assurance officer; and
- the inspection activities required to monitor the construction and/or installation of the components of the Remedial Action(s).

5.1.13 Respond to Design Review Comments: The Work Parties shall submit a written response to each comment provided by EPA. The design changes shall be incorporated in the Final RD/RA Work Plan.

## 5.2 Remedial Action

The Work Parties shall implement the Remedial Action as detailed in the EPA-approved RD/RA Work Plan. The following activities shall be completed in implementing the Remedial Action.

- 5.2.1 Ground Water Monitoring Activities: The Work Parties shall implement and maintain the Ground Water Monitoring Program as outlined in the approved RD/RA Work Plan.
- 5.2.2 Institutional Control Area Activities: The Work Parties shall implement and maintain the provisions of the ICA Ordinance as outlined in the EPA-approved RD/RA Work Plan.
- 5.2.3 Alternative Water Supplies: The Work Parties shall monitor the need for, and shall provide and maintain alternative water supplies, if necessary to assure that Health-Based Levels are met, as outlined in the EPA-approved RD/RA Work Plan.
- 5.2.4 Monitoring Well Construction: The Work Parties shall install and maintain additional monitoring wells as required by EPA. Construction of monitoring wells shall meet the standards applicable to well construction and well drillers, as set forth in Neb. Rev. Stat. § 46-1201 *et seq.* and Title 178, chapter 10 and 12.

## 5.5 Monitoring Reports

- 5.5.1 Baseline Well Inventory and Initial Ground Water Assessment Report: Prior to implementation of the GWMP, the Work Parties shall complete an inventory of wells within the ICA. From this well inventory, specified wells shall be selected for future periodic sampling. These wells shall be selected based on the criteria that they are either critical drinking water wells or, due to their location or historical sampling history, provide critical information on the location and or movement of known contamination plumes. These critical wells shall be sampled for a minimum of eight quarters to provide a baseline of information on current contaminant levels. In the event that the Work Parties believe that sufficient sampling has been conducted on the critical wells, this information shall be summarized and submitted to EPA for review. The report shall include a discussion of data quality, including a thorough discussion of sampling and analytical methodologies. If EPA believes that the existing data is sufficient to design the GWMP, the requirement for eight quarters of sampling will be waived.
- 5.5.2 Annual Reports: The Work Parties shall submit Annual Reports to EPA throughout implementation and operation of the RA until project objectives are met. Annual Reports shall include, but need not be limited to:

- (1) *Sampling and Analytical Data:* The Work Parties shall provide analytical results and other data from each ground water sampling event which occurred during the reporting period. The data validation package and a synopsis of the validated data and summary tables shall also be included. The raw analytical data supporting the summary tables shall be maintained by the Work Parties in accordance with the Consent Decree and delivered to EPA, if requested.
- (2) *Evaluation of Migration of Contamination:* If the contaminated ground water plume expands beyond the original non-detect plume boundary delineated in the baseline sampling or if contaminant concentrations increase by more than 10% above prior detected concentrations, the Work Parties shall provide written notice to the EPA within 7 days of their receipt of validated data indicating such an occurrence.
- (3) *Evaluation of Protectiveness of Remedy:* Each Annual Report shall evaluate the protectiveness of the Remedial Action based upon data generated from the ground water monitoring program. Each report shall include a map showing the estimated extent of the contaminated ground water plume boundary, as delineated by non-detect well locations, and the locations of the existing and new wells sampled. The report shall also contain a qualitative evaluation of the protectiveness of the remedy based on the results of the previous reporting period's monitoring data, trends from any prior data, and shall include an updated qualitative assessment of potential risks to users of the ground water.
- (4) *Modification to Remedial Action:* A request to modify the GWMP may be included in the Annual Report. Any modification shall be in compliance with Section XXXI of the Consent Decree (MODIFICATION).

5.5.3 Five-Year Ground Water Report: The Work Parties shall produce a Ground Water Report on the same day the fifth Annual Report is due and every 5 years on that date, which presents and assesses the data collected under the GWMP through December of the preceding year. The ground water information shall be tabulated and figures drawn which show targeted COC distribution in the aquifer. The extent of impact shall be defined for all COCs.

As part of the Five-Year Ground Water Report, the Work Parties may request a reduction of the sampling frequency and/or the number of sampling locations, or a

deletion of individual chemicals from the sampling program. EPA's decision to delete a chemical(s) will be based upon validated data which indicates a chemical has achieved Health-Based Levels for a minimum of 4 consecutive sampling periods. Such request(s) for deletion shall include a discussion of the rationale and the basis for the proposed modifications and are subject to EPA's review and approval under the Consent Decree. Any modifications to the approved GWMP shall be incorporated into a revised or amended GWMP, subject to EPA's approval.

If the data collected from the sampling indicates that the ground water monitoring program is inadequate in providing information on the levels or movement or to assess the protectiveness and the effectiveness of the Remedial Action, EPA may require the installation of additional ground water monitoring wells and laboratory analysis of samples from such wells, and/or laboratory analysis of additional sampling parameters. The Work Parties shall comply with the requirement, consistent with Paragraph 12 of the Consent Decree and subject to Section XIX (DISPUTE RESOLUTION) of the Consent Decree. If any of the monitoring wells designated for sampling in the GWMP or subsequent revisions are destroyed or in any way become unusable, the Work Parties shall submit a plan to repair or replace the well to EPA for approval within 45 days of discovery of damage or destruction unless deemed unnecessary by EPA. Within 45 days of EPA's approval of the well repair/replacement plan, the Work Parties shall repair or replace each well in accordance with the approved well repair/replacement plan subject to force majeure provisions in the Consent Decree.

The Work Parties shall sample monitoring wells in accordance with the GWMP, or any amendment thereto, until data demonstrates that Health-Based Levels have been achieved for all COCs for a minimum of four consecutive sampling events.

## **6.0 PROJECT COMPLETION/CLOSE OUT**

### **6.1 Final Close-Out Activities**

When sampling data demonstrate that project goals have been achieved in accordance with the SOW and Consent Decree, the Work Parties shall notify EPA that the Work is complete pursuant to the conditions of the Consent Decree and shall follow the procedures set forth in Section XIV (CERTIFICATION OF COMPLETION) of the Consent Decree. Project close-out activities can include, as appropriate, abandonment and/or removal of ground water monitoring wells, site restoration, and the removal of any institutional controls. All RA close-out activities conducted by the Work Parties shall comply with ARARs. The Work Parties shall submit preliminary RA close-out plans in the Work Plan,

either as amendments to existing portions of the Work Plan or as a separate RA close-out plan.

## **6.2 Remedial Action Report**

Within 30 days of EPA's notification of completion in accordance with Section XIV (CERTIFICATION OF COMPLETION), the Work Parties shall submit a Final Remedial Action Report to EPA and NDEQ. In the report, a registered professional engineer and the Work Parties' Project Coordinator shall state that all phases of Work have been completed in full satisfaction of the requirements of the Consent Decree, this SOW and the Remedial Design.

The Remedial Action Close-out Report shall include, but need not be limited to:

- (1) A brief chronology and description of all Work performed, including a discussion of the implementation of all project plans;
- (2) A discussion of all operating and analytical data obtained after termination of system operations. This discussion shall include, but need not be limited to, an explanation of how the data demonstrate compliance with the objectives of the ROD and the Consent Decree;
- (3) Discussion of any problems encountered and corrective action taken or recommended;
- (4) Certification specified in Section XIV (Certification of Completion) of the Consent Decree, signed by a responsible corporate official of the Work Parties or the Work Parties' Project Coordinator, containing the following statement:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."





## **Attachment 1 Regulations and Guidance Documents**

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RD/RA process:

1. American National Standards Practices for Respiratory Protection. American National Standards Institute Z88.2-1980, March 11, 1981.
2. ARCS Construction Contract Modification Procedures September 89, OERR Directive 9355.5-01/FS.
3. CERCLA Compliance with Other Laws Manual, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (DRAFT), OSWER Directive No. 9234.1-01 and -02.
4. Community Relations in Superfund - A Handbook, U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9230.0-313.
5. A Compendium of Superfund Field Operations Methods, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
6. Construction Quality Assurance for Hazardous Waste Land Disposal Facilities, U.S. EPA, Office of Solid Waste and Emergency Response, October 1986, OSWER Directive No. 9472.003.
7. Contractor Requirements for the Control and Security of RCRA Confidential Business Information, March 1984.
8. Data Quality Objectives for Remedial Response Activities, U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.
9. Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual, U.S. EPA Region IV, Environmental Services Division, April 1, 1986 (revised periodically).
10. EPA NEIC Policies and Procedures Manual, EPA-330/9-78-001-R, May 1978, revised November 1984.
11. Federal Acquisition Regulation, Washington, DC: U.S. Government Printing Office (revised periodically).
12. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final, U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive NO. 9355.3-01.

13. Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potential Responsible Parties, U.S. EPA Office of Emergency and Remedial Response, EPA/540/G-90/001, April 1990.
14. Guidance on Expediting Remedial Design and Remedial Actions, EPA/540/G-90/006, August 1990.
15. Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites, U.S. EPA Office of Emergency and Remedial Response (DRAFT), OSWER Directive No. 9283.1-2.
16. Guide for Conducting Treatability Studies Under CERCLA, U.S. EPA, Office of Emergency and Remedial Response, Prepublication version.
17. Guide to Management of Investigation-Derived Wastes, U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9345.3-03FS, January 1992.
18. Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, Office of Research and Development, Cincinnati, OH, QAMS-004/80, December 29, 1980.
19. Health and Safety Requirements of Employees Employed in Field Activities, U.S. EPA, Office of Emergency and Remedial Response, July 12, 1982, EPA Order No. 1440.2.
20. Interim Guidance, on Compliance with Applicable of Relevant and Appropriate Requirements, U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
21. Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.
22. Methods for Evaluating the Attainment of Cleanup Standards: Vol. 1, Soils and Solid Media, February 1989, EPA 23/02-89-042; vol. 2, Ground water (Jul 1992).
23. National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule; Federal , § 40 CFR Part 300, March 8, 1990.
24. NIOSH Manual of Analytical Methods, 2nd edition. Volumes I-VII for the 3rd edition, Volumes I and II, National Institute of Occupational Safety and Health.
25. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, National Institute of Occupational Safety and Health/Occupational Health and Safety Administration/United States Coast Guard/Environmental Protection Agency, October 1985.
26. Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, February 19, 1992, OSWER Directive 9355.7-03.

27. Procedure for Planning and Implementing Off-Site Response Actions, Federal Register, Volume 50, Number 214, November 1985, pages 45933-45937.
28. Procedures for Completion and Deletion of NPL Sites, U.S. EPA, Office of Emergency and Remedial Response, April 1989, OSWER Directive No. 9320.2-3A.
29. Quality in the Constructed Project: A Guideline for Owners, Designers and Constructors, Volume 1, Preliminary Edition for Trial Use and Comment, American Society of Civil Engineers, May 1988.
30. Remedial Design/Remedial Action (RD/RA) Handbook, U.S. EPA, Office of Solid Waste and Emergency Response (OSWER) 9355.0-04B, EPA 540/R-95/059, June 1995.
31. Revision of Policy Regarding Superfund Project Assignments, OSWER Directive No. 9242.3-08, December 10, 1991. [Guidance, p. 2-2]
32. Scoping the Remedial Design (Fact Sheet), February 1995, OSWER Publ. 9355-5-21 FS.
33. Standard Operating Safety Guides, U.S. EPA, Office of Emergency and Remedial Response, November 1984.
34. Standards for the Construction Industry, Code of Federal Regulations, Title 29, Part 1926, Occupational Health and Safety Administration.
35. Standards for General Industry, Code of Federal Regulations, Title 29, Part 1910, Occupational Health and Safety Administration.
36. Structure and Components of 5-Year Reviews, OSWER Directive No. 9355.7-02, May 23, 1991. [Guidance, p. 3-5]
37. Superfund Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, April 1990, EPA/540/G-90/001.
38. Superfund Remedial Design and Remedial Action Guidance, U.S. EPA, Office of Emergency and Remedial Response, June 1986, OSWER Directive No. 9355.0-4A.
39. Superfund Response Action Contracts (Fact Sheet), May 1993, OSWER Publ. 9242.2-08FS.
40. TLVs-Threshold Limit Values and Biological Exposure Indices for 1987-88, American Conference of Governmental Industrial Hygienists.
41. Treatability Studies Under CERCLA, Final. U.S. EPA, Office of Solid Waste and Emergency Response, EPA/540/R-92/071a, October 1992.

42. USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, U.S. EPA, Office of Emergency and Remedial Response, July 1988.

43. USEPA Contract Laboratory Program Statement of Work for Organic Analysis, U.S. EPA, Office of Emergency and Remedial Response, February 1988.

44. User's Guide to the EPA Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

45. Value Engineering (Fact Sheet), U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9355.5-03FS, May 1990.



## Attachment 2 Schedule for Deliverables and Notifications for the Area-Wide RD/RA

Deliverable	Draft		Final	
	# of copies	Due Date	# of copies	Due Date
Well Inventory/Initial Ground Water Assessment Report <sup>1</sup>	2	within 30 days after the later of the Effective Date or Authorization to Proceed	2	30 days after collection of the last quarterly monitoring samples
RD/RA Work Plan (including but not limited to) Well Inventory/Initial Ground Water Assessment QAPP/GWMP Basis for Design Institutional Control Actions Schedule of Plans and Specs Project Schedule Construction Quality Assurance Operation & Maintenance Requirements	2	within 30 days after the later of the Effective Date or the Authorization to Proceed	2	15 days after approval of the Well Inventory/Initial Ground Water Assessment Report (if submitted as separate Report) and receipt of EPA comments
Work Plan for Further Response Work	2	30 days after Notification by EPA	2	15 days after receipt of EPA comments
Annual Monitoring Reports	2	1st of the 13th month after Lodging and annually on that date	2	15 days after receipt of EPA comments
5-Year Report	2	same day as the 5th Annual Monitoring Report and every 5 years on that date	2	15 days after receipt of EPA comments
Final Remedial Action Report	2	30 days after Notification by EPA	2	15 days after receipt of EPA comments
<b>Notification</b>	<b>Written or Verbal Notification</b>		<b>Due Date</b>	
Selection of Supervising Contractor	Written		10 days after lodging of the Consent Decree	
Alternate Contractor List	Written		30 days after EPA's Notice of Disapproval of Supervising Contractor	
Selection of Alternative Supervising Contractor	Written		21 days after EPA's Authorization to Proceed	
Notification of Planned Sampling Activity	Verbal		Not less than 28 days in advance of sample collection	

<sup>1</sup> Well Inventory and Initial Ground Water Assessment may be submitted as a separate Report or as part of the RD/RA Work Plan if the Settling Defendants choose to submit available data in lieu of future quarterly sampling.

## Attachment 2 Schedule for Deliverables and Notifications for the Area-Wide RD/RA (continued)

Notification	Written or Verbal Notification	Due Date
Site Access Problems	Written	Within 45 days of of EPA's request for access
CERCLA 103/EPCRA 304 Response Event	Verbal	Within 24 hours of incident
CERCLA 103/EPCRA 304 Response Event	Written	Within 20 days of start of incident
CERCLA 103/EPCRA 304 Response Event	Written	Within 30 days of conclusion of incident
Opportunity to Cure a Notice of Deficiency	Written	Within 14 days of EPA Notice of Deficiency
Resubmission of Plans	Written	Within 30 days of Notice of Disapproval
Assurance of Ability to Complete Work	Written	With 30 days of entry of the Consent Decree
Notice of Pre-Certification Inspection	Written	Within 90 days after Completion of Work
Payments for Past Costs	Written and Electronic Funds Transfer	Within 30 days of the Effective Date
Payment of Future Response Costs	Written and certified or cashier's check(s)	Within 45 days of receipt of bill
Objections to Billing Statements	Written	Within 30 days of receipt of bill
Initiation of Resolution of Payments by Settling Federal Agencies	?	Within 120 days of the Effective Date
Resolution of Payments by Settling Federal Agencies	?	Within 30 days of initiation of discussion
Comprehensive General Liability Insurance	Written	Within 15 days of commencing on-site work, Annual certifications thereafter until 1 year after RA completion
Force Majeure Event	Verbal	Within 48 hours of becoming aware
Force Majeure Event	Written	Within 7 days of verbal notification
Dispute Resolution	Written	Within 15 days of receipt of EPA's Notice
Period of Informal Negotiations	?	Within 20 days of when the dispute arises
Formal Dispute Resolution/Settling Respondent's Statement of Position	Written	Within 20 days after the conclusion of informal dispute resolution
Formal Dispute Resolution/EPA's Statement of Position	Written	Within 14 days of receipt of Settling Defendant's Statement of Position
Formal Dispute Resolution/Response	Written	Within 7 days of receipt of EPA's Statement of Position
Motion for Judicial Review under Paragraph 64 of the Consent Decree	Written	Within 10 days of receipt of EPA's Decision
Motion for Judicial Review under Paragraph 65 of the Consent Decree	Written	Within 20 days of receipt of EPA's Decision



Suit or Claim for Contribution		Written	60 days prior to the initiation of suit or claim
Attachment 2 Schedule for Deliverables and Notifications for the Area-Wide RD/RA (continued)			
Notification	Written or Verbal Notification	Due Date	
Suit or Claim for Contribution	Written	Within 10 days after service of the complaint	
Motion for Summary Judgment	Written	Within 10 days after service of the complaint	
Motion for Summary Judgment	Written	Within 10 days of receipt of court order setting a case for trial	
Destruction of Records	Written	90 days prior to the destruction of documents or records	



ORDINANCE No. 3754

AN ORDINANCE OF THE CITY OF HASTINGS, NEBRASKA, AMENDING CHAPTER 32, ARTICLE VI, OF THE HASTINGS CITY CODE PERTAINING TO WATER, AND CHAPTER 38 PERTAINING TO SUBDIVISIONS; ESTABLISHING THE HASTINGS INSTITUTIONAL CONTROL AREA; PROHIBITING CERTAIN ACTS; REQUIRING REGISTRATION OF CERTAIN EXISTING WELLS; REQUIRING PERMITS FOR ALL NEW WELLS; DEFINING TERMS; REPEALING INCONSISTENT PROVISIONS; AND ESTABLISHING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF HASTINGS, NEBRASKA:

SECTION 1. That Hastings City Code Section 32-601 be amended to read as follows:

**32-601. Definitions.**

For the purposes of this Article, the following words and phrases shall have the meanings respectively ascribed to them by this Section:

- (1) Available. A water main shall be deemed to be available to a property when such main lies within two hundred (200) feet of the property line of such property unless, in the judgment of the Board of Public Works, connection to such main cannot be reasonably and practically made.
- (2) Belt Line, Main or Commercial Main. Any pipe, other than a supply pipe, used for the purpose of carrying water to or distributing it in the city.
- (3) Board. The City's Board of Public Works, sometimes referred to as Hastings Utilities, and any department or employee designated by the Board to carry out any of the functions assigned to the Board under the terms of this Article.
- (4) City Engineer. Use of the term "City Engineer" in this Article shall be deemed to include the City Engineer or any designee or representative of the City Engineer.
- (5) Contaminated water or groundwater. Water or groundwater shall be deemed to be contaminated if testing results show that the amount of any element, substance, compound, or mixture, including disease-causing agents, exceeds the maximum contaminant level established for such substance under the drinking water standards established by Title 179, Nebraska Administrative Code, Chapter 2, Section 002.
- (6) Department. The City's Department of Development Services, which is generally charged with the functions of planning, inspections, code compliance and community development.

(7) Domestic Water Well. A water well providing water to any water supply system furnishing water for human consumption other than a public water supply system, or for the watering of livestock, poultry, farm and domestic animals used in operating a farm, and for the irrigation of lands not exceeding a total of two acres in area.

(8) Domestic Use. Any use of groundwater required for human needs of health and sanitation, including but not limited to drinking, cooking, washing, bathing, showering, and other similar household uses of water.

(9) Effective Date. The effective date of this ordinance shall be January 1, 2001.

(10) Institutional Control Area. An area wherein contaminated soils and groundwater are located, and which has been designated by city ordinance as an institutional control area.

(11) Institutional Controls. Non-engineering measures, such as governmental controls, proprietary controls, enforcement tools, and informational devices, intended to affect human activities in such a way as to prevent or reduce exposure to hazardous substances within an institutional control area.

(12) Nonpotable Water Well. Any water well other than a domestic water well or a public water supply well.

(13) Person. This term shall be deemed to include any person, whether one or more, and any corporation, partnership, limited liability company, limited liability partnership, or other entity.

(14) Public Water Supply Well. A water well designed and used to provide water for a public water supply system which provides the public piped water fit for human consumption, where such system has at least 15 service connections or regularly serves at least 25 individuals.

(15) Separate Premises. When considering the expediency of permitting deduct meters or more than one consumer to secure water from the same service or supply pipe shall be construed to mean a separate dwelling or apartment, a building or structure used for a separate business or each distinct business in a business building or structure; provided, that if deduct meters for two or more consumers be allowed or permitted on the same service or supply pipe, each customer shall be billed for and shall pay the monthly minimum; and provided further; that where a separate business and a dwelling are used in connection by the same owner or by the same tenant and are on the same city lot and are occupied by the same person and his family, the same shall constitute a separate premises.

(16) Service Pipe. The pipe extending from the curb cock or valve to the meters.

including the curb cock or valve, to the curb line of the street; and when used in connection with a fire main or sprinkler system shall mean the pipe extending from the main or belt line to the wall of the building.

(18) **Water Main.** A pipe transporting water produced by one or more public water supply wells.

(19) **Water Well.** Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed for the purpose of exploring for ground water, monitoring ground water, utilizing the geothermal properties of the ground, obtaining hydrogeologic information, or extracting water from or injecting water into the underground water reservoir.

(20) **Well Owner.** (Also referred to herein as the owner of a well.) The person who is the record title owner of the real estate upon which a well is located.

**SECTION 2.** That Hastings City Code Section 32-606 be amended to read as follows:

**32-606. Connection to public water system required; domestic water wells allowed under certain circumstances.**

(1) It shall be unlawful to operate or maintain any domestic water well within the city, or the city's two mile extraterritorial jurisdiction, except as provided hereinafter and in Code sections 32-611 through 32-623.

(2) Any person desiring to install any domestic water well within the city, or the city's two mile extraterritorial jurisdiction shall make application with the Department for the right to install, operate or maintain such well, and shall pay an application fee in the amount established in the City Council Fee Resolution.

(3) The application to the Department shall contain the information described in Code section 32-616. The Department shall forward a copy of said application to the Board for its review.

(4) If the Board determines that (a) the application for the domestic water well is complete; (b) no water main is available to provide the required water; (c) the health and safety of the public and of the users of said water will not be jeopardized or placed at risk; and (d) the well will not be located within any institutional control area, then it shall issue a permit to the applicant authorizing the installation of the said well, and furnish a copy of said permit to the Department. The Board shall keep all well permits on file.

(5) Whenever the Board determines that the applicant's water requirements can be satisfied by connection to a water main, the Board shall notify the property owner of that fact and of the requirements of the following subsection.

(6) Upon receipt of that notice, the owner of the property shall file the application with the Board to connect to the city's water system as described in section 32-605 of this code. The property owner shall pay the proper out-of-district fee and proceed with connection.

(7) Any habitable structure described in subsection (1) above which has an approved private existing domestic water well which does not lie in an institutional control area shall be exempt from the requirement to connect to a public water supply main so long as the well is operable. At such time as replacement of such well is necessary, the property shall become subject to this section, and the property owner shall make the application to the Board as described above.

(8) The Department shall not issue a building permit for any new structure until it is satisfied that the water service to such structure will be connected to the public water supply or that a well permit has been issued.

**SECTION 3.** That Hastings City Code Section 32-611 be enacted to read as follows:

**32-611. Contaminated groundwater; findings and intent.**

(1) The Hastings City Council finds and determines that certain contaminants have, for many years, existed in certain areas of the groundwater in and near the City of Hastings, and that certain legislation is necessary and appropriate for the purpose of supplementing the various measures undertaken by the City of Hastings and others, aimed at reducing or eliminating the possibility that humans will come into contact with such contaminants.

(2) It is the intention of the City that existing water wells within the area where contaminated groundwater exists, which area shall be hereafter known as the Hastings Institutional Control Area, shall be allowed to remain in existence only if reasonable safeguards are implemented so that there is no reasonable likelihood of human contact with the contaminants in the groundwater.

(3) It is also the intention of the City that no new domestic water wells may be installed within the Hastings Institutional Control Area.

(4) It is not the intention of the City to prevent the installation of agricultural irrigation wells, or the installation of wells for non-contact use by businesses within the Institutional Control Area, so long as adequate safeguards are in place to prevent human consumption of the water from said wells.

**SECTION 4.** That Hastings City Code Section 32-612 be enacted to read as follows:

**32-612. Declaration of Hastings Institutional Control Area.**

The controls described in Code Sections 32-601 and 32-611 et seq., shall apply within the bounds of the Hastings Institutional Control Area, which boundaries are hereby defined as follows:

Beginning at the intersection of 12th Street and Crane Avenue in Hastings; thence East on 12th Street to Maxon Avenue; thence South on Maxon Avenue to J Street; thence West on J Street to Crane Avenue extended; thence North on Crane Avenue extended to the point of beginning.

**SECTION 5.** That Hastings City Code Section 32-613 be enacted to read as follows:

**32-613. Registration of existing wells within Institutional Control Area.**

Within sixty days after the effective date of this ordinance, all existing water wells within the Hastings Institutional Control Area, other than public water supply wells, shall be registered in the office of the Board or of the Department by the owner of the real estate upon which the well is located. There shall be no fee for registering an existing water well. The Department shall forward all registrations to the Board, where they shall be kept on file.

**SECTION 6.** That Hastings City Code Section 32-614 be enacted to read as follows:

**32-614. Registration of existing water wells; information required.**

The following information shall be furnished in connection with registering a water well in existence in the Institutional Control Area on the effective date of this ordinance:

- (1) The name and address of the person owning the real estate upon which the well is located.
- (2) The address and legal description of the property on which the well is located.
- (3) The address of all properties being served by groundwater pumped from the well.
- (4) A description of the uses of the water pumped from the well. The application shall state whether the groundwater is being, or will be, used for human consumption including, but not limited to, drinking, cooking, washing, or other household uses.
- (5) The location of the nearest public water main to the property served by the well.
- (6) The depth of the well.

(7) An accurate diagram showing the location of the well in respect to the boundaries of the property, the nearest street, road, or highway intersection, and any on site septic or waste disposal system.

**SECTION 7.** That Hastings City code Section 32-615 be enacted to read as follows:

**32-615. Permitting of nonpotable water wells.**

After the effective date of this ordinance, no person may drill or install a nonpotable water well within the City of Hastings or its two mile extraterritorial jurisdictional area prior to applying for and obtaining a well permit in the manner described in this chapter. Any person filing an application for a new nonpotable water well shall pay an application fee in the amount established in the City Council Fee Resolution.

**SECTION 8.** That Hastings City Code Section 32-616 be enacted to read as follows:

**32-616. Permitting of water wells; application for well permit.**

The following information shall be submitted to the Department in connection with applying for a well permit for a domestic water well or a nonpotable water well within the City of Hastings or its two mile extraterritorial jurisdictional area:

- (1) The name and address of the person owning the real estate on which the proposed well is to be located.
- (2) The address and legal description of the property on which the proposed well is to be located.
- (3) The address of all properties to be served by groundwater pumped from the proposed well.
- (4) A description of the uses to be made of water to be pumped from the proposed well. The application shall state whether the groundwater will be used for human consumption including, but not limited to, drinking, cooking, washing, or other household uses.
- (5) The location of the nearest public water main to the property served by the proposed well.
- (6) The depth of the proposed well.
- (7) An accurate diagram showing the location of the proposed well in respect to the boundaries of the property, the nearest street, road, or highway intersection, and any on site septic or waste disposal system.



The well for which a permit has been obtained must be installed within six (6) months after issuance of the permit, unless the Board, for good cause, grants an extension of the permit. The well permit shall expire unless the well is installed within such six month period, or any extension thereof.

**SECTION 9.** That Hastings City Code Section 32-617 be enacted to read as follows:

**32-617. Standards for considering application for a nonpotable water well.**

The Board shall approve the application for a nonpotable water well within the City of Hastings or its two mile extraterritorial jurisdictional area if it is satisfied that:

- (1) the required information contained in the application is complete;
- (2) the well is not a domestic water well;
- (3) the proposed use of the nonpotable water well will comply with the requirements of this Article.
- (4) the location of the well does not violate any well spacing or encroachment regulations or restrictions established by any federal, state, or local authority.

**SECTION 10.** That Hastings City Code Section 32-618 be enacted to read as follows:

**32-618. Special exceptions for drinking water wells in the Institutional Control Area.**

(1) Any drinking water well in existence within the Institutional Control Area on the effective date of this ordinance may remain in use so long as the water, either at the wellhead, or after point of use treatment, meets the drinking water standards established by Title 179, Nebraska Administrative Code, Chapter 2, Section 002. The determination of whether the water meets such standards shall be made by the Board.

(2) All point of use treatment devices shall be installed and maintained at the expense of the property owner; provided that nothing herein shall prevent the property owner from pursuing damages or other relief from any party responsible for contamination of groundwater available to the property owner.

(3) Any such existing domestic water well may be redrilled or replaced so long as the redrilled or replaced well meets one of the above exceptions; provided however, such right shall exist only if an existing water main is not available to the property served by such domestic water well. Any replacement well may be drilled or installed only within one hundred (100) feet of the original domestic water well, and the location must first be approved by the Department and the Board.

**SECTION 11.** That Hastings City Code Section 32-619 be enacted to read as follows:

**32-619. Required warning signs in Institutional Control Area.**

(1) Every owner of real estate located within the Hastings Institutional Control Area upon which a well is now or may hereafter be located, shall conspicuously post and maintain a warning sign on or near such well, and at all water service points where water may be obtained from said well for human consumption.

(2) The warning sign shall, at a minimum, bear the following wording: "WARNING. THIS WATER IS NOT FOR HUMAN CONSUMPTION." The signs will be uniform in appearance, and shall be designed and produced by the City Engineer. The cost of such signs shall be borne by the City.

The foregoing sign requirement shall not apply to a domestic water well or a service point which meets the special exception provisions of Section 32-618.

**SECTION 12.** That Hastings City Code Section 32-620 be enacted to read as follows:

**32-620. Institutional Control Area; access; sampling and testing.**

(1) Every owner of a well within the Hastings Institutional Control Area shall, upon reasonable notice, grant access to said well to any local, state or federal official who requests access for the purpose of inspecting, sampling, testing, or inventorying said well.

(2) All existing domestic water wells in the Hastings Institutional Control Area, remaining in use after the effective date of this ordinance, shall be inspected and tested for contamination by the Board. Testing shall be conducted in accordance with testing protocol designed by the Board establishing the contaminants of concern and the frequency of testing.

(3) The testing costs for wells within the Institutional Control Area shall be borne by the Board.

**SECTION 13.** That Hastings City Code Section 32-621 be enacted to read as follows:

**32-621. Nuisance.**

All wells which:

- (1) are not registered or permitted as required by this Article;
- (2) produce contaminated water which is made available in any way for human consumption; or
- (3) provide a conduit for contamination into the aquifer for any reason, such as being in a state of disrepair, or the manner in which the well was constructed, are hereby declared to be a

public nuisance, and shall be immediately brought into compliance with this Article, or capped and closed at the owner's expense in accordance with all local, state, and federal rules and regulations governing the closing and capping of wells.

**SECTION 14.** That Hastings City Code Section 32-622 be enacted to read as follows:

**32-622. Prohibited acts.**

(1) It shall be unlawful for any person to install a well within the City of Hastings or its two mile extraterritorial jurisdiction without obtaining a permit for said well from the Board.

(2) It shall be unlawful to fail to register any well as required by this Article.

(3) It shall be unlawful for a person to fail to erect or maintain any warning sign required by the terms of this Article.

(4) It shall be unlawful for a person to remove, deface, or cover any warning sign required by the terms of this Article.

**SECTION 15.** That Hastings City code Section 32-623 be enacted to read as follows:

**32-623. Violation.**

(1) Any person found to be in violation of this Article shall be fined in an amount not to exceed one hundred dollars. Each day that the violation continues shall be deemed to be a separate and distinct offense.

(2) In the event that the Board determines that any well is a nuisance within the meaning of Hastings City Code Section 32-621, it shall send a written notice to the owner by certified mail, return receipt requested, notifying the addressee of the violation. The written notice shall contain the following information:

(a) The street address and legal description sufficient for identification of the premises on which the well is located.

(b) A brief and concise description of the acts or circumstances constituting the nuisance.

(c) A brief and concise description of the corrective action required to be taken to eliminate the nuisance.

(d) A brief and concise statement advising the addressee that if the nuisance is not remedied within seven days (excluding weekends and holidays) after receipt of the certified letter, the Board may order electrical power to the well disconnected and will request the City Attorney to file an action to abate the public nuisance.

(3) If the addressee of the notice referred to above fails to abate said nuisance within the time specified, the City Attorney shall, upon written request of the Board, proceed to abate said public nuisance pursuant to the Hastings City Code, and take all steps to have the costs of said action assessed against the owner or the real estate upon which the well is located.

(4) In the event the use of the groundwater in violation of this Article might cause irreparable harm or pose a threat to public health, safety, or welfare, the written notice to abate as set forth above, shall not be required as a condition precedent to commencing a legal action to obtain abatement of the nuisance. The City of Hastings may, with the consent of the Mayor, immediately file an action requesting such temporary and permanent orders as are appropriate to expeditiously and permanently abate said public nuisance and protect the public health, safety and welfare.

**SECTION 16.** That Hastings City Code Section 38-117 be amended to read as follows:

**38-117. Required improvements.**

(1) Generally. Except as provided hereinbelow, the owner or developer of a tract to be subdivided shall install, at its own expense, satisfactory curb, gutter, and sidewalks on all property abutting streets or roadways; pavement on roadways; and all water and sanitary and storm sewer lines within the subdivision which are necessary to serve the subdivision. Installation of the above improvements shall be in accordance with the specifications of the city. Water and sewer lines installed will require the approval of an on-the-job inspector before acceptance by the city. The cost of providing this inspection will be the responsibility of the owner or developer of the tract to be subdivided. Sewer lines shall have flow elevations as directed by the city; provided, the requirement that the owner or developer install improvements at its own expense may be satisfied by compliance with any City Council or Board of Public Works policy pertaining to funding of improvements.

(a) In a subdivision of lots, as defined in Section 38-101, located within one (1) mile of the city limits, the requirements for public sewer and water installations, curb, gutter and sidewalk, plus concrete paved road may be waived only by the City Council after a recommendation by the Planning Commission. Individual water supply and waste disposal systems may be installed when no public water supply system or public sanitary sewer system are available to the property, but such individual systems must be installed in compliance with applicable city ordinances.

(b) In a subdivision of lots, as defined in Section 38-101, located more than one (1) mile from the city limits, the requirements for public sewer and water installations, curb, gutter and sidewalk, plus concrete paved road may be waived only by the City Council, after a recommendation by the Planning Commission, and the following be accomplished:

(i) Individual water supply and waste disposal systems may be installed when no public water supply system or public sanitary sewer system are available to the property, but such individual systems must be installed in compliance with applicable city ordinances.

(ii) Subdivision streets, other than county roads, shall be constructed and surfaced with asphaltic concrete, in accordance with specifications of the City Engineer. Curb, gutter and sidewalk may be omitted.

(2) Pavement. The minimum width of roadway service shall be thirty-six (36) feet from back of curb to back of curb including cul-de-sacs. The pavement width in a cul-de-sac shall be exclusive of the center island. (See Figure 1 Typical Street Section.) Portland cement concrete, or asphaltic concrete may be used for the roadway surface. Curb and gutter shall be of Portland cement concrete. All curb and gutter and roadway surface shall comply with the specifications of the city. Storm water run-off shall be adequately handled through inlets, catch basins or other drainage constructions in accordance with a drainage plan.

(3) Sidewalks. All sidewalks shall be constructed of Portland cement concrete on both sides of all streets shown on the final plat. Sidewalks shall comply with the specifications of the city.

(4) Inspection. The City Engineer shall make three (3) inspections of all pavement construction:

(a) First inspection to check compaction of subgrade before subbase is applied.

(b) Second inspection to check subbase for compaction, material, sizes, thickness, etc., before prime coat is applied.

(c) Final inspection after roadway is completed.

(d) Twenty-four hours' notice shall be given to the City Engineer regarding any requested inspection.

(5) Bond provisions. After a plat has been duly approved by the Planning Commission and Council, as required in these rules, and after said plat has been duly recorded with the Register of Deeds as required by law, construction may begin on buildings within the subdivision. No building permit shall be issued for a building within such subdivision until the owner or developer has extended all required improvements to and in front of such lot, provided for such improvements pursuant to any City Council or Board of Public Works policy pertaining to funding of improvements as permitted in subparagraph (1) above, or furnished a surety bond conditioned upon the completion of all required improvements in compliance with the specifications of the city. Such surety bond shall be in an amount to be calculated by the

City Engineer. Such calculation shall be reasonable and shall not be less than the estimated actual cost of the installation of the required improvements.

(a) The above surety bond shall guarantee the proper installation of the required improvements for the entire block upon which a lot for which a building permit is requested, fronts. Such installation shall be completed within two (2) years of the effective date of the bond unless the City Council, after recommendation of the Planning Commission, gives special permission to the developer to extend the period for a specific time. In case installation of required improvements is not completed as specified, the city may proceed to construct, reconstruct or install all or any portion of the required improvements using proceeds from the surety bond. Any excess money shall be refunded to the guarantor.

(b) Upon final inspection and approval by the city, such surety bond or unused portion thereof shall be released, provided the owner or developer shall first furnish or cause to be furnished a surety bond conditioned upon the endurance of the improvements, excluding normal wear and damage beyond the control of the owner. Said guarantee shall remain in effect for a period on one (1) year from the date of final approval. The amount of such maintenance bond shall not be less than twenty percent (20%) of the amount of the bond guaranteeing the installation. If, at the end of one (1) year, following the date of final approval, there has appeared to be no failure due to faulty or substandard construction of required improvements, then said maintenance bond shall be refunded in full.

**SECTION 17.** That existing Hastings City Code Sections 32-601, 32-606, and 38-117 and all other ordinances or provisions in conflict with this ordinance are hereby repealed.

**SECTION 18.** The provisions of this ordinance are separable, and the invalidity of any phrase, clause or part of this ordinance shall not affect the validity or effectiveness of the remainder of this ordinance.

**SECTION 19.** This ordinance shall take effect and be in full force from and after its passage, approval and publication or posting as required by law, in its entirety, or in pamphlet form, as the case may be, said effective date being January 1, 2001, and this ordinance shall thereafter be included in the Hastings City Code Book.

PASSED AND APPROVED this 13<sup>th</sup> day of November, 2000.

 Mayor



\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney